



Experience at your Service

(B)usiness (I)ntelligence on (B)ig (I)ron

Presenters

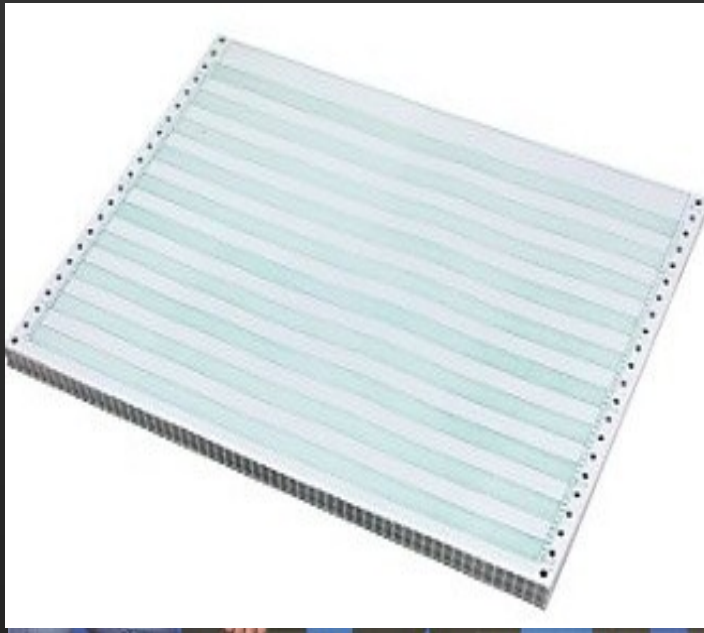
Drew Moore: BI Support Specialist

Craig Moody: zSeries Pre-sales Specialist

Robbin Lanning: System Z Sales Specialist

Danny Ross: Sr. Marketing Representative

The Evolution of B.I.



Programmers spent the next weeks/months fixing bugs, and for the most part failed to fix them. Fortunately there were some wise people who realized that business needed a similar IT application with state-of-the-art reporting. Inside the 1990s, the drive to program, but also about the lack of application development via reporting. Reports were usually programmed hastily and without much thought.

Trends in Today's BI

Increase in Number of Users

Significant increase in Data Volumes

Faster Performance

More Uptime / More Real Time

User Trends

Traditionally BI was used by management.

Now being used by more operational staff

Their BI needs are different

Usually less tech savvy and less analytical but
sometimes understand the business in ways
management and IT do not

Data Volume Trends

Every day more data is being created

More data means better predictive analytics

More data adversely affects performance

What to do with older data?

More data in unstructured formats

More data that needs to be secured

The BI Data Reality

Data generated from multiple disparate applications

Often generated in silos with little or no ties to other parts of the business

Some information not stored in digital format

Data Warehouse needs to be created

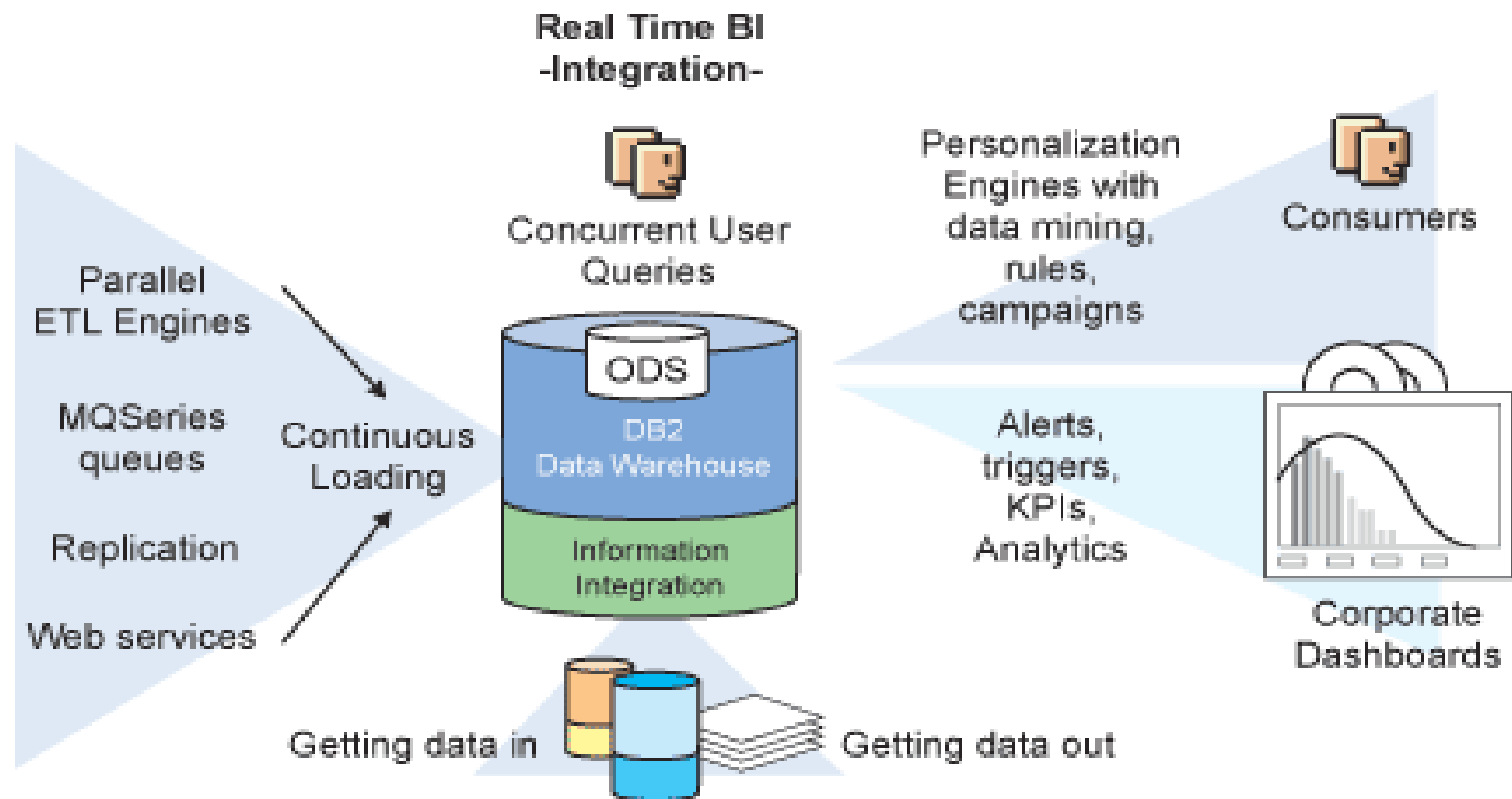
Data needs to be ETL'ed to a warehouse
timely

Quiz #1

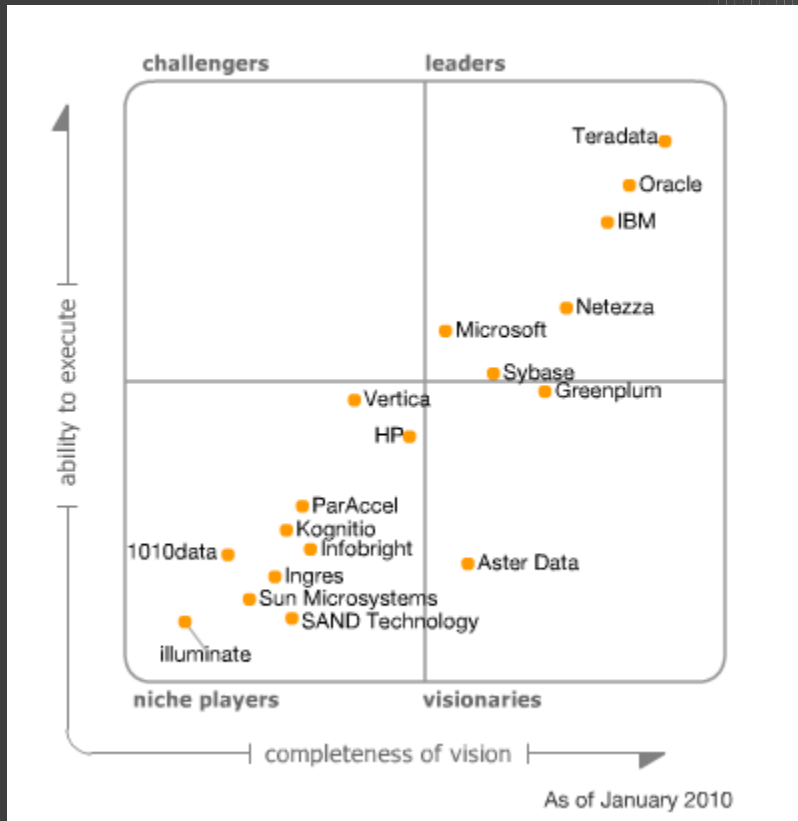
What is the best option to solve the impending crush of data from a BI perspective?

- A. Create individual data warehouses for each application/department
- B. Create one consolidated data warehouse
- C. Pretend it isn't there and hope it goes away.
- D. Wave the surrender flag and give up

The BI Data Movement Process



Warehouse RDBMS



&



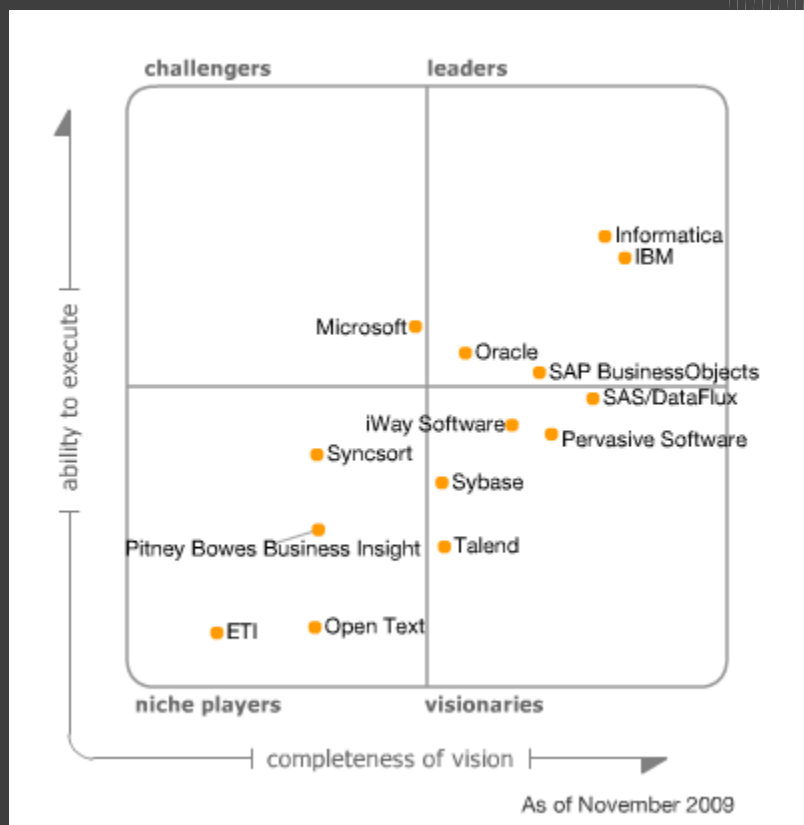
Federation

Allows access to non-RDBMS data: IMS, IDMS, CICS, VSAM, Adabas

Infosphere Classic Federation runs on z/OS

Infosphere Federation server runs on zLinux

Metadata, ETL & Data Cleansing



z/OS



zLinux

Analytic Appliances



Cognos Now!
Smart Analytics Optimizer 9600 for System Z



Twin Fin
Twin Fin i-Class
Skimmer



Management Tools run on z/OS

Business Intelligence Tools

Figure 1. Magic Quadrant for Business Intelligence Platforms



ORACLE

sas THE POWER TO KNOW.

Information Builders

+ a b | e a SOFTWARE

Microsoft of knowledge™

IBM

pentaho™ open source business intelligence™

View

Quiz #2

Public Folders - IBM Cognos Connection - Windows Internet Explorer

http://sles10

File Edit View Favorites

Favorites Welcom

Public Folders - IBM Cognos C

IBM Cognos Connection

Public Folders

Public Folders

☐	Name
☐	Dashboard Folder
☐	Dashboard Objects
☐	GO Data Warehouse
☐	GO Data Warehouse
☐	GO Sales (analysis)
☐	GO Sales (query)
☐	Great Outdoor Sales
☐	Practical Examples
☐	Sales and Marketing
☐	Sales and Marketing
☐	Sample Template
☐	Samples

10/60 Z S H C

10/52 H S K R N

12/40 C H K R V D

15/32 H O N S D C V

12/25 O K H D N R C S

10/20 V H D N K U O S R C

15/15 B D C L K Z V H S R O A

12/12 H K G B C A N O M P V E S R

12/12 P K U E O B T V X R M J H C A Z D I

10/8 D K N T W U L J S P X V M R A H C F O Y Z G

Platform Choices

Distributed Scale Up

vs.

Mainframe Scale up

More Physical Servers OR
Bigger Servers to handle VM
More Memory
Windows/UNIX cost per
instance
Electrical costs go up linearly
Floor space increase
Labor Costs Go Up Linearly
25% server utilization
25-30% storage utilization
Network traffic increases
Disaster Recovery Painful

More Specialty Engines
Tried/true z/VM
More Memory
Linux/zOS cost per processor
Same electric cost
Same floor space footprint
Labor costs go up fractionally
90+% server utilization
80+% storage utilization
Network traffic all self
contained

Real World Applications

- IBM using Cognos on System Z
- Field Management System moved from previous vendor to Cognos on zLinux in 5 months
- Worldwide deployment to now 40K users
- Simplified/Consolidated reports from 14 to 4
- Added drill down capabilities
- Improved reporting performance
- User adoption - 350,000 reports in the 1st 5 months
- Better territory analysis for management

Real World Applications

Customer had distributed Cognos
Ported to System Z without changes
Reports that didn't finish on distributed would
finish on System Z
Architecture would allow customer growth at
same cost as distributed
Throughput was 400x that of distributed
Improvement traced back to synergy between
Cognos and DB2 on z/OS

9 Reasons For BI on the Mainframe

1. Proximity to Existing Data
2. Timeliness to Data
3. Availability to Data
4. Highest Security
5. Update/Maintenance Issues
6. Efficient Mixed Workload Support
7. Speed of Processing
8. Virtualization
9. Lower TCO than Distributed

Questions and Answers

LRS IT Solutions Offerings

- ◆ **Server Hardware**
System x, BladeCenter, POWER Systems, System z
- ◆ **Storage Solutions**
XIV, Enterprise, SAN, NAS, Virtualization, Tape, VTS
- ◆ **Software Solutions**
Tivoli Storage Manager / Tivoli Productivity Center
Information Management / Business Intelligence
- ◆ **Financing Alternatives**
Flexible options from IBM Global Finance & LRS





Thank you.